WHAT IS CLAIMED IS:

1. A method for verifying and implementing a requested modification to an advertised route in a data communications network, comprising the steps of:

receiving at a network provisioning system a customer-generated route advertisement modification request to cause one of (a) provisioning a new route advertisement or (b) withdrawal of an existing route advertisement;

validating the new route advertisement when the customer-generated route advertisement modification constitutes provisioning of said new route advertisement and rejecting said new route advertisement if unable to be verified;

entering the customer-generated route advertisement modification into an official routing database to make such route advertisement modification available to providers of network access; and

periodically checking at least one of such providers of network access to verify whether such route advertisement modification remains effective.

2. The method according to claim 1 wherein the step of validating a new route advertisement includes the steps of:

(a) checking whether the customer owns a network address associated with the new route advertisement;

(b) checking whether a conflict exists between any existing route advertisement and the new route advertisement;

(c) checking whether an alternate route advertisement corresponds to the new route advertisement; and

(d) checking whether the new route advertisement violates a local routing policy.

3. The method according to claim 2 wherein the step of checking whether the customer owns the network address associated with the new route advertisement includes the step of querying a database containing a registry of network addresses.

4. The method according to claim 2 wherein the step of checking whether a conflict exists between any existing route advertisement and the new route advertisement includes the step of querying the official routing database and a customer provisioning database.

5. The method according to claim 1 wherein the customer enters the route advertisement modification via a web interface.

6. The method according to claim 1 wherein the customer enters the route advertisement modification using via a Border Gateway Protocol.

7. The method according to claim 1 wherein the customer enters the route advertisement modification statically.

8. A method for verifying and implementing a request to advertise a newly provisioned route in a data communications network, comprising the steps of:

receiving at a network provisioning system a customer-generated request to advertise a newly provisioned route;

validating the advertisement for the newly provisioned route and rejecting said route advertisement if unable to be verified;

entering the customer-generated route advertisement into an official routing database to make such route advertisement available to providers of network access; and

periodically checking at least one of such providers of network access to verify whether such route advertisement remains effective.

9. The method according to claim 8 wherein the step of validating a new route advertisement includes the steps of:

(a) checking whether the customer owns a network address associated with the new route advertisement;

(b) checking whether a conflict exists between any existing route advertisement and the new route advertisement;

(c) checking whether an alternate route advertisement corresponds to the new route advertisement; and

(d) checking whether the new route advertisement violates a local routing policy.

10. The method according to claim 9 wherein the step of checking whether the customer owns the network address associated with the new route advertisement includes the step of querying a database containing a registry of network addresses.

11. The method according to claim 9 wherein the step of checking whether a conflict exists between any existing route advertisement and the new route advertisement includes the step of querying the official routing database and a customer provisioning database.

12. The method according to claim 8 wherein the customer enters the route advertisement modification via a web interface.

13. The method according to claim 8 wherein the customer enters the route advertisement modification using via a Border Gateway Protocol.

14. The method according to claim 8 wherein the customer enters the route advertisement modification statically.

15. A method for verifying and implementing a requested withdrawal of an advertised route in a data communications network, comprising the steps of:

receiving at a network provisioning system a customer-generated request to withdraw an existing route advertisement;

entering the customer-generated route withdrawal request into an official routing database to make such route withdrawal request to providers of network access; and

periodically checking at least one of such providers of network access to verify whether such route withdrawal request remains effective.

16. The method according to claim 15 further including the step of verifying whether the customer making the route withdrawal request is authorized to do so.